

[002] This application is a national stage completion of PCT/EP2003/010551 filed September 23, 2003 which claims priority from German Application Serial No. 102 45 359.4 filed September 27, 2002.

[003] FIELD OF THE INVENTION

[004] The invention concerns a method for carrying out gearshifts of an automatic transmission in a motor vehicle by way of an increased spontaneity of the automatic transmission and a shifting frequency is reduced according to the preamble of Claim 1.

[005] BACKGROUND OF THE INVENTION

[015] SUMMARY OF THE INVENTION

[027] BRIEF DESCRIPTION OF THE DRAWINGS

[028] ~~Below, the invention is explained in more detail~~ The invention will now be described, by way of example, with reference to an ~~example embodiment~~ illustrated in the accompanying drawings[.]] in which [[show]]:

[033] DETAILED DESCRIPTION OF THE INVENTION

[036] Figs. 3 and 4 now show two examples of gear shift sequences of the automatic transmission according to Fig. 1. Thus, the gear shifts are, for example, designed as overlap shifts. The sequence is based on a typical driving situation, in which the driver begins an overtaking process and, therefore, initiates a downshift corresponding to his wish, but during the overtaking process he recognizes that he must give way to oncoming traffic and, accordingly, interrupts his overtaking process by releasing the accelerator pedal. It is assumed that, due to the return movement of the accelerator pedal, an upshift characteristic of the electronic transmission control unit 13 is exceeded, after previously falling below a downshift characteristic of the electronic transmission control unit 13 due to the pressing of the accelerator pedal. Thus, after a traction downshift, the automatic transmission begins a thrust upshift. To enable

comparison of the shift sequences, in both Figures, according to the invention, the sequences are indicated with continuous lines and the corresponding sequences, according to the prior art, with broken lines.

[040] Still before the previously requested downshift has ended and the actual gear indicator G_IST has changed to the value i2 of the new gear, at time t3 the driver then reduces the accelerator pedal angle FPW with the result that at a time t4, an upshift characteristic line stored in the electronic transmission control unit 13 is exceeded. Thus, at time t4 the nominal gear indicator G_SOLL changes back from i2 to the original first gear i1. According to the invention, the uncompleted traction downshift is immediately interrupted and all the shift sequences A_RS associated with the downshift originally called for are changed into corresponding shift sequences A_HS of a now immediately commencing thrust upshift back to the first gear i1, which was active before the downshift. ◆